



**new**

# Hop Varieties

*With taste testing in Bud Light*

Society of Barley Engineers

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# Outline for tonight's talk

- Bud Light dry hopping process
- Four new/trending hops for taste tests:
  - Ariana
  - Cashmere
  - Sabro
  - BRU-1
- Mystery "old" (as in historic) hop tasting game

# Bud Light dry hopping process

- Uncap Bud Light (best cold)
- Add ~2 g/12 oz of hop pellets
- Cap loosely\*
- Shake until foam escapes cap
- Tighten cap
- Wait 1-2 days
- Chill
- Enjoy your transformed Bud Light
- Optional: Drink an unhopped one and marvel at its lack of flavor



\*Assumes use of 40 oz bottles or 16 oz aluminum "bottles" with resealable caps  
Re-capping standard twist-off bottles is possible but can be tricky to get good seal

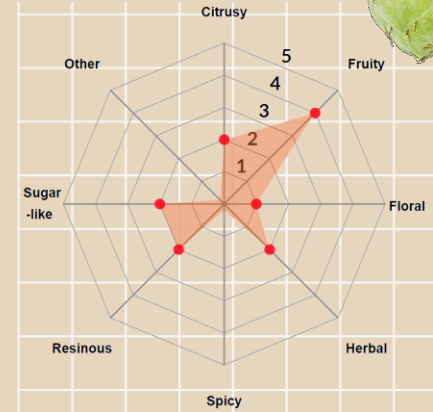
# Ariana



**Origin:** Germany. Bred at the Hüll Hop Research Center, Ariana is a cross between Herkules and a wild male hop.

**Usage:** Aroma. Although high enough in alpha acids to handle bittering duty, Ariana's oil content and organoleptic profile make it a great finishing hop.

**Aroma & Flavor Characteristics:** Fruity, with intense berry character of black currant and gooseberry. Citrus high notes (particularly grapefruit) with slight resinous and herbal tones.



Alpha Acid	9-13%
Beta Acid	4.5-6%
Cohumulone	40-42%
Total Oil	1.6-2.4mL/100g
Myrcene	58% of total
Linalool	0.5% of total

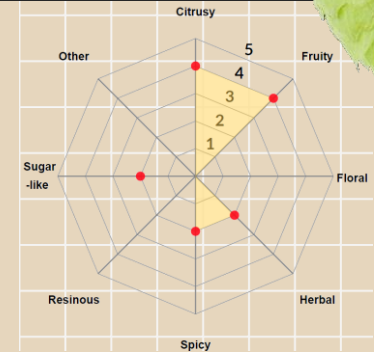
# Cashmere



**Origin:** USA. Cashmere was developed by Washington State University by crossing Cascade and Northern Brewer. It was first released in 2013.

**Usage:** Cashmere really shines when used for aroma and flavor in hop-forward styles, or where the intensity of its exotic tropical notes will complement sour, fruited, or funky ales. Its respectable alpha content combined with low cohumulone lets it contribute smooth bitterness if used early in the boil.

**Aroma & Flavor Characteristics:** Complex and intensely fruity, with strong overtones of lemon, lime, peach, and melon. Secondary notes of coconut, lemongrass, candy, and herbs can show through in whirlpool or dry hop additions.



Alpha Acid	7-10%
Beta Acid	4-7%
Cohumulone	22-25%
Total Oil	0.5-1.8 mL/100g
Myrcene	39-42% of total
Humulene	26-29% of total
Caryophyllene	12-13 % of total
Farnesene	< 1% of total

<https://bsgcraftbrewing.com/cashmere>

<https://www.hopsteiner.com/variety-data-sheets/Cashmere/>

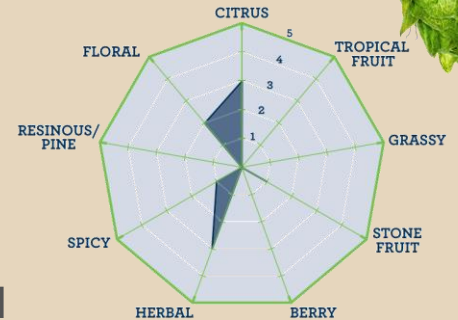
# Sabro



**Origin:** USA. Formerly HBC 438, Sabro was released by the Hop Breeding Company in 2018. It is the result of a unique cross-pollination of a female neomexicanushop.

**Usage:** Aroma. With a multifaceted bouquet and high level of aromatic oils (particularly myrcene), Sabro excels in finishing and dry hop additions.

**Aroma & Flavor Characteristics:** Complex and distinct fruit and citrus. Unique tangerine, coconut, tropical and stone fruit underscored by hints of cedar and mint.



Alpha Acid	12-16%
Beta Acid	4-7%
Cohumulone	20-24%
Total Oil	2.5-3.5 mL/100g
Myrcene	50-70% of total
Humulene	8-15% of total
Caryophyllene	7-11% of total
$\beta$ -Pinene	0.5-1% of total
Linalool	0.5% of total
Geraniol	0.8-1.6% of total

<https://bsgcraftbrewing.com/sabro>

[https://www.johnihaas.com/wp-content/uploads/2018/04/Haas-HopSpecSheets\\_SABRO\\_2018-1.pdf](https://www.johnihaas.com/wp-content/uploads/2018/04/Haas-HopSpecSheets_SABRO_2018-1.pdf)

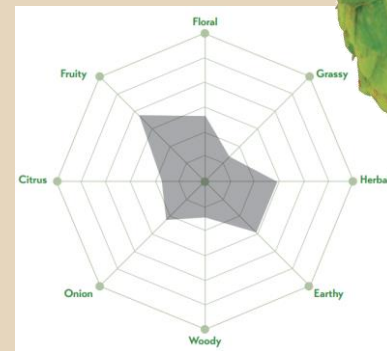
# BRU-1



**Origin:** USA. BRU-1 was developed through open pollination of Cascade at Brulotte Farms in Toppenish, WA.

**Usage:** Pale ales, IPAs, funky Belgian styles. Pairs well with Citra, Chinook, and other US-origin aroma hops.

**Aroma & Flavor Characteristics:** Pineapple, stone/tropical fruit, and spicy aroma.



Alpha Acid	13-15%
Beta Acid	8-10%
Cohumulone	35-37%
Total Oil	1.5-2 mL/100g
Myrcene	50-55% of total
Humulene	9-11% of total
Caryophyllene	7-8% of total
Farnesene	< 1% of total

[https://www.yakimavalleyhops.com/product\\_p/hopsbru1pellets16oz2019.htm](https://www.yakimavalleyhops.com/product_p/hopsbru1pellets16oz2019.htm)  
[https://www.johnihaas.com/wp-content/uploads/2018/06/hop\\_template-Bru-1.pdf](https://www.johnihaas.com/wp-content/uploads/2018/06/hop_template-Bru-1.pdf)  
<http://brulosophy.com/2017/03/02/the-hop-chronicles-bru-1/>

# Mystery "old" hop tasting game

Five "classic" hop varieties steeped in Bud Light

- Cascade
- Northern Brewer
- Nugget
- Saaz
- Simcoe

<http://bit.ly/sbe-hop>

Can you identify them all correctly?



# Acknowledgements

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# Resources for More Information

## 2019 New & Trending Hops Reviews

<https://daily.seventy.com/hot-new-hop-varieties-of-2019/>

<https://beerconnoisseur.com/articles/hop-report-trending-hops-2019>

## 2018 New Hops Review

<https://usaberratings.com/en/blog/insights-1/top-5-new-and-revised-hops-varieties-to-look-out-for-in-2018-46.htm>

## BSG

<https://bsgcraftbrewing.com/craftbrewing-hops>

## Hopsteiner

<http://www.hopsteiner.com/variety-data-sheets/>

## Yakima Chief Hops

[https://shop.yakimachief.com/media/wysiwyg/Yakima\\_Chief\\_Hops\\_Varieties.pdf](https://shop.yakimachief.com/media/wysiwyg/Yakima_Chief_Hops_Varieties.pdf)

## Comprehensive Hop Directory

<http://www.hopslis.com/hops/>

# Questions?